

REMARKS

Claims 1-77 have been cancelled and new claims 78-90 have been added.

Applicant requests consideration of these new claims.

Claim 78 is allowable for at least the reason that it recites a method of forming a floating gate transistor that includes forming an oxide-comprising layer against and physically contacting a semiconductive substrate. Claim 78 goes on to recite, forming a first layer against and physically contacting the oxide-comprising layer where the first layer includes semiconductive material and a dopant with at least some of the dopant physically contacting the oxide-comprising layer. Claim 78 further recites, after forming the first layer, forming a second layer against and physically contacting the first layer comprising with the second layer including semiconductive material and less dopant than the first layer.

The cited references do not teach or suggest these elements. For example, referring to US patent 5,882,994 to Araki (“Araki”), no mention or suggestion is made of a method that includes forming doped semiconductive material again and physically contacting an oxide-comprising layer with at least some of the dopant physically contacting the oxide-comprising layer and after forming the doped semiconductive layer, forming a second layer of semiconductive material and less dopant than the first layer, against and physically contacting the doped semiconductive layer. In reference to the prior art, Araki depicts a floating gate 84 over a cell gate oxide film with an oxide-nitride-oxide insulation film 85 on floating gate 84 (Araki, column 1, lines 25-30 and lines 43-45). As an improvement to this prior art structure, Araki describes the formation of a three-layered polysilicon layer 104 of non-doped polysilicon/impurity

doped polysilicon/non-doped polysilicon on a cell gate oxide film 103. This polysilicon layer is formed by first forming non-doped polysilicon layer over oxide film 103, then forming an impurity doped polysilicon layer over the non-doped polysilicon layer and then forming another non-doped polysilicon layer over the impurity doped polysilicon layer. (Araki, column 3, lines 20-25) Araki goes on to describe the advantages of this improvement as follows: "because the lowest layer of the polysilicon layer touching the cell gate oxide film does not contact phosphorous, it is easy to avoid damage to the cell gate oxide film in the oxidation process" (Araki, column 4, lines 44-50).

Araki, either when describing the prior art or when describing the improvements to the prior art does not teach or suggest positively forming a first layer against and physically contacting an oxide-comprising layer where the first layer comprises semiconductive material and a dopant with at least some of the dopant physically contacting the oxide-comprising layer and after forming the first layer, forming a second layer against and physically contacting the first layer with the second layer comprising semiconductive material and less dopant than the first layer. This combination is neither taught nor suggested by Araki.

Because the cited references do not teach or suggest all of the elements of claim 78, claim 78 is allowable. Claim 79-90 depend from claim 78 and are therefore allowable for at least the reasons discussed above regarding claim 78. Applicant requests allowance of claims 78-90 in the Examiner's next action.

This application is believed to be in immediate condition for allowance.

Therefore, action to that end is earnestly solicited.

Respectfully submitted,

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By: 

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